

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION**

HILL-ROM COMPANY, INC.,)
HILL-ROM SERVICES, INC., and)
HILL-ROM MANUFACTURING, INC.)

Plaintiffs,)

v.)

GENERAL ELECTRIC COMPANY,)

Defendant.)

Case No. 2:14-cv-187-RGD-LRL

PLAINTIFFS' OPENING BRIEF ON CLAIM CONSTRUCTION

Plaintiffs Hill-Rom Company, Inc., Hill-Rom Services, Inc., and Hill-Rom Manufacturing, Inc. (collectively, Hill-Rom) submit this Opening Brief on Claim Construction pursuant to the Court's Scheduling Order (Dkt. 65). For the reasons set forth below, the Court should construe the disputed terms as proposed by Hill-Rom because these constructions are faithful both to the plain and ordinary meaning of the terms themselves as well as the intrinsic record.

In contrast, defendant General Electric Company (GE) has proposed constructions that violate basic canons of claim construction, including attempts to narrow the claim scope by importing limitations from the specification in nearly every proposed construction. Similarly, GE twists the ordinary patent prosecution process into an extraordinary – and unfounded – surrender of claim scope. GE's litigation-induced constructions add limitations where none exist, presumably to avoid infringement. As it has done since the beginning of this litigation, GE seeks to substitute attorney arguments for the intrinsic record. But as black-letter law holds, it is the intrinsic record that controls.

BACKGROUND OF THE PATENTS AND CLAIMS

According to the United States Centers for Disease Control and Prevention, hospital-associated infections affect 1 in 20 people admitted to a hospital in the United States. Hand hygiene has shown to be one of the most effective solutions to this problem. As a leading innovator in the healthcare industry, Hill-Rom has worked over the past 15 years to develop and refine the first technology that can objectively and automatically gauge healthcare workers' compliance with hand hygiene requirements used by acute-care facilities.

Hill-Rom's inventions have been recognized as novel by the U.S. Patent & Trademark Office, which granted Hill-Rom a series of patents directed to using real-time locating systems (RTLS) to automate monitoring of hand hygiene compliance. These include U.S. Patent Nos. 6,727,818 (the '818 Patent), and 8,368,544 (the '544 Patent) (attached hereto as Ex. A and Ex. B, respectively, to Declaration of A. Taylor Corbitt (Corbitt Decl.)). The claims of these Patents that include terms as to which Hill-Rom seeks a construction appear in their entirety at Corbitt Decl. Ex. A, Columns 26-38, and Ex. B, Columns 26-28.¹ Claims 1 and 37 of the '818 Patent (and the asserted claims that depend on them) are generally directed to methods of monitoring hand hygiene compliance, and claim 43 of the '818 Patent and claim 1 of the '544 Patent (and the asserted claims that depend on them) are generally directed to systems for monitoring compliance.

¹ As of the submission of this Brief, GE has not yet provided Hill-Rom with any discovery. After discovery and prior to trial, Hill-Rom will provide a final list of asserted claims. In addition to the '818 and '544 Patents, Hill-Rom also included U.S. Patent No. 7,408,470 (the '470 Patent) in its Complaint, but in the interest of streamlining this case in preparation for the upcoming trial, did not include the '470 Patent in its preliminary list of asserted claims that it voluntarily provided to GE and does not seek in this brief construction of any of its terms.

LEGAL STANDARDS

Claim construction is a question of law for the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 371 (1996). The goal of claim construction is to define the disputed claim terms so as to provide the fact finder with sensible instructions for determining the meaning of the patent claims at issue. Claim construction focuses on the intrinsic evidence – namely, the language of the claims themselves, the patent specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc). The analytical focus of claim construction must begin with and remain centered on the language of the claims themselves. *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001). It is the claims of the patent that define the invention to which the patentee is entitled to exclude others. *Phillips*, 415 F.3d at 1312.

There is a heavy presumption that a claim term carries its plain and ordinary meaning. *3M Innovative Properties Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1370 (Fed. Cir. 2003); *see also Hill-Rom Serv., Inc. v. Stryker Corp.*, No. 2013-1450, 2014 WL 2898495 at *4 (Fed. Cir. June 24, 2014). A trial court is not obligated to construe terms that have ordinary meanings, lest trial courts be inundated with requests to parse the meaning of every word in the asserted claims. *Innovative Commc'ns. Techs., Inc. v. Vivox, Inc.*, No. 2:12-cv-7, 2012 WL 5331573 at *4 (E.D. Va. Oct. 26, 2012) (*quoting O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008)). The claim construction process is simply a way of “elaborating the normally terse claim language [] in order to understand and explain, but not to change, the scope of the claims.” *Union Oil Co. of California v. Atlantic Richfield Co.*, 208 F.3d 989, 995 (Fed. Cir. 2000). It follows that the ordinary meaning of claim terms “may be readily apparent” and that “claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314.

Indeed, some claim terms are so simplistic that no construction is required at all. *See, e.g., W.E. Hall Co., Inc. v. Atlanta Corrugating, LLC*, 370 F.3d 1343, 1350 (Fed. Cir. 2004).

Patents include not only claims, but also a specification, which the Court should consider as part of claim construction. *Phillips*, 415 F.3d at 1315. The specification is the single best resource (after the claims themselves) for guidance as to claim construction. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Notwithstanding this, limitations from the specification cannot be read into the claims. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1328 (Fed. Cir. 2012) (“We have ‘cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.’”) (citation omitted); *Anchor Wall Sys. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1306 (Fed. Cir. 2003). The specification may be used to aid interpretation of the claims, but it may not be used as a source for adding limitations. Even when a patent discloses only a single embodiment in the specification, the claims of the patent need not be construed as limited to that embodiment. *Gemstar-TV Guide Int’l, Inc. v. ITC*, 383 F.3d 1352, 1366 (Fed. Cir. 2004). The examples described and illustrated in the specification are intended to be just that—examples, not claim limitations; in the words of the Federal Circuit: “Specifications teach. Claims claim.” *Rexnord Corp. v. Laitram*, 274 F.3d 1336, 1344 (Fed. Cir. 2001) (citation omitted).

In addition to the specification, the Court may also consider the prosecution history. *Phillips*, 415 F.3d at 1317. A patentee may not recapture through claim construction specific meanings disclaimed during prosecution. *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). However, prosecution disclaimer cannot be applied unless the patentee has “unequivocally and unambiguously” disavowed a particular meaning of a claim term. *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013). As a matter

of law, if a prosecution argument is subject to more than one reasonable interpretation, one of which is consistent with a proposed meaning of a disputed term, there is no “clear and unmistakable” disclaimer. *SanDisk Corp. v. Memorex Prods. Inc.*, 415 F.3d 1278, 1287 (Fed. Cir. 2005). Additionally, and as this Court has held, arguments simply distinguishing prior art from the claimed invention are not sufficient to rise to the level of “clear and unmistakable” disclaimer. *Innovative Commc’ns. Techs.*, 2012 WL 5331573 at *9.

Although the Federal Circuit has emphasized the importance of intrinsic evidence in claim construction, it also has made clear that the Court may rely on extrinsic evidence, which consists of all evidence external to the patent and prosecution history, including dictionaries and learned treatises. *Phillips*, 415 F.3d at 1317. However, extrinsic evidence may not be used to vary or contradict the otherwise unambiguous meaning of a claim term. *Desper Prods., Inc. v. QSound Labs.*, 157 F.3d 1325, 1333 (Fed. Cir. 1998). Moreover, while extrinsic evidence can shed useful light on the relevant art, it is less significant than intrinsic evidence in determining the proper claim construction. *Phillips*, 415 F.3d at 1316.

The constructions that stay true to the language of the patents and most naturally align with the patent’s description of the invention will be, in the end, the correct constructions. *Id.* The disputed terms of the claims of the ’818 Patent and the ’544 Patent should be analyzed within this legal framework.

ARGUMENT

1. Hill-Rom’s Proposed Constructions Should Be Adopted.

Hill-Rom and GE have both proposed constructions for five terms: “contamination zone,” “patient contact zone,” “combined signal,” “contaminated,” and “tracks movement.” For the reasons discussed in greater detail below, the Court should adopt Hill-Rom’s constructions.

A. “contamination zone” (’818 Patent: claims 1-3, 5, 10, 12-15, 37, 43-45, 47, 52, 54-56)

Hill-Rom Construction	GE Construction
Any area designated by the hospital where after caregivers have entered they must wash their hands	An area designated by the facility, distinct from other areas that have not been identified as contamination zones, where after persons have entered they must wash their hands

Only Hill-Rom’s proposed construction is supported by the express definition that the specification uses to define a “contamination zone.” The inventors explicitly defined “contamination zone” to be “any area designated by the hospital where after caregivers have entered they must wash her [sic] hands.” (Corbitt Decl. Ex. A at Col. 10, ll. 62-64) (emphasis added) It is a bedrock principle of claim construction that, where the specification sets forth a specific definition of a term or phrase, that meaning should be used. *See Phillips*, 415 F.3d at 1316.

GE’s proposed construction goes too far by improperly attempting to add a limitation that the contamination zone also must be “distinct from other areas that have not been identified as contamination zones.” This strategically created language is nowhere found in the claims, the specification, or the prosecution history, and GE’s litigation-inspired construction should fail on this ground alone.

Not only is GE’s proposed additional language not supported by the intrinsic record – it actually contradicts the specification by seeking to create rigid borders and fixed boundaries where one category could never overlap with another. The ’818 Patent reveals, however, that the invention is not so limited. For example, the specification of the ’818 Patent states that a patient room may sometimes be a contamination zone where contamination may occur (Corbitt Decl. Ex. A at Col. 10, line 66), but also may at a different time or under different circumstances be a

patient contact zone where, of course, contamination should be prevented. (*Id.*, Col. 10, ll. 27-28) The specification also describes at least one embodiment as including a “patient zone [that] . . . is a critical contamination zone.” (*Id.*, Col. 9, ll. 48-49) These descriptions plainly eliminate the possibility that a contamination zone is “distinct from other areas that have not been identified as contamination zones” as required by GE’s construction. As such, GE’s attempt to so limit a contamination zone is contrary to the inventors’ intent regarding the proper scope of the claim, and thus should be rejected. *See Phillips*, 415 F.3d at 1316 (holding that where the specification sets forth the inventors’ intent regarding the proper scope of the claim, such intent is dispositive).

GE’s construction is also contrary to the language of the claim itself and, if adopted, would render the claim insolubly ambiguous. Claim 1 of the ’818 Patent expressly provides that the system determines “whether a person who has entered a patient contact zone has washed her hands since her most recent exposure to a contamination zone **other than her current exposure to the patient contact zone.**” Like the specification language cited above, this claim language makes plain that a patient contact zone may be deemed a contamination zone once a caregiver exits.

There is no support in the intrinsic evidence for limiting the term “contamination zone” as GE has proposed, and GE’s attempt to so limit the claims should be rejected. Hill-Rom’s proposed construction is grounded in the claims themselves and the specification, and should be adopted.

B. “patient contact zone” (’818 Patent: claims 1-3, 5, 10, 12-15, 43-45, 47, 52, 54-56)

Hill-Rom Construction	GE Construction
Any area, such as a patient room, where contact with a patient may occur	An area within a designated zone where patient contact may occur

The parties agree that a “patient contact zone” is an area “where contact with a patient may occur.” This is consistent with the specification, which states that an example of a patient contact zone is a patient room, *i.e.*, a place where a patient may be and contact may occur. (Corbitt Decl. Ex. A at Col. 10, ll. 27-28) The Court’s construction should begin and end with this definition.

But GE again improperly seeks to add a limitation, asserting that the patient contact zone also must be within something GE calls a “designated zone,” or what amounts to a “zone within a zone.” This added limitation is created from whole cloth. There is no support for it in the claim language, specification or prosecution history; the added language is undefined, creates ambiguity, and should not be included in the proposed construction.

GE’s proposed “zone within a zone” is not only absent from the specification, it is contradicted by it. A “zone” is described throughout the specification as an area in and of itself, not as something that exists only within another zone. For example, Figure 5, which is one of the embodiments, shows a patient contact zone that is not “within” any other zone. (*Id.*, Fig. 5)

Nor is there any definition for GE’s proposed “designated” zone. The term “designated” is nowhere in the specification or the file history. Who or what makes such a designation, and on what basis, is unanswered by GE’s construction. And it is neither part of the claims nor the specification. Adding GE’s “designated zone” to the construction would render the metes and bounds of the claim ambiguous. This is impermissible as a matter of law: constructions, such as

GE's, that create ambiguity in the claims or fail to resolve the parties' disputes improperly leave claim construction to the jury. *See Markman*, 517 U.S. at 388-89; *see also Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d 1378, 1383 (Fed. Cir. 2009) ("[T]he court's obligation is to ensure that questions of the scope of the patent claims are not left to the jury."). GE's proposed construction, which suffers from these shortcomings, should be rejected. Hill-Rom's construction, which is consistent with the intrinsic evidence and which clarifies the scope of the claim, should be adopted.

C. "combined signal" ('544 Patent: claims 1, 5, 7, 12)

Hill-Rom Construction	GE Construction
A signal that includes information originating from more than one source	A single signal or data packet generated by a single sensor, which combines the handwashing compliance signal with the identification signal

Hill-Rom's construction reflects what a "combined signal" most naturally is as described by the patent; a signal that includes information originating from more than one source. GE's construction, on the other hand, lards up this simple definition with added limitations to narrow the claims and create a proposed construction that is litigation-based and ambiguous. Hill-Rom's construction is simple and will aid the jury; GE's is confusing and will frustrate the jury's understanding.

Claim 1 of the '544 Patent describes the two sources of information included in the "combined signal": (1) "information indicating that an identification signal from the badge has been received by the sensor," and (2) "information indicating that a compliance signal has been generated by the handwashing monitoring device." (Corbitt Decl. Ex. B at Col. 26, ll.30-34) These two pieces of information are then combined by the reader and the RTLS software before being pushed to the master station. GE's construction of "combined signal," however, purposely

rewrites these features. When substituted for the claim term, GE's construction would read as follows: "the master station being configured to receive via the network [a single signal or data packet generated by a single sensor, which combines the handwashing compliance signal with the identification signal], including information indicating that an identification signal from the badge has been received by the sensor and information indicating that a compliance signal has been generated by the handwashing monitoring device" (bracketed language reflects GE's construction). The Court should reject a proposed construction where, like GE's proposal, "adding this limitation would be redundant and would add nothing to the construction of the term." *See Innovative Commc'ns. Techs.*, 2012 WL 5331573 at *25 (citation omitted). GE's proposed construction is even worse because the redundancy is confusing and thus fails the test of "ensur[ing] that questions of the scope of the patent claims are not left to the jury." *Every Penny Counts, Inc.*, 563 F.3d at 1383.

GE's construction also is not in keeping with the plain language of the claims and the specification of the '544 Patent. The claim language requires only that the master station "receive via the network a combined signal." (Corbitt Decl. Ex. B at Col. 26, ll. 29-30) GE improperly seeks to add several limitations to improperly narrow the claims, *i.e.*, the requirements of *where and how* the signal is generated, as well as limiting the signal to a "single" signal. These limitations are not present in the claims and not supported by the specification.

GE presumably is seeking to inject a purported disavowal into its construction from the prosecution history. In opposing Hill-Rom's preliminary injunction motion, GE argued for disavowal based on allegedly limiting statements that the inventors made during prosecution of the '544 Patent. GE relied solely on a partial statement made in one paragraph of an Office Action response – without telling the Court that in the immediately preceding paragraph, Hill-

Rom noted twice that the example that it was discussing was only “one embodiment” of the claimed invention. (Corbitt Decl. Ex. C at 7) GE’s support falls far short of the unmistakable and unambiguous disclaimer of scope that would be required for a finding of disavowal. *See Biogen*, 713 F.3d at 1095; see also *Innovative Commc’ns. Techs.*, 2012 WL 5331573 at *9. And, of course, it is “the ‘totality of the prosecution history’ [that] informs the disavowal inquiry.” *See SciCoTech GMBH v. Boston Scientific Corp.*, No. 9:07–CV–76, 2008 WL 4148246 at *4-5 (E.D. Tex. Aug. 29, 2008) (*citing Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1326 (Fed. Cir. 2002)) (declining to import a limitation where prosecution history as a whole revealed other distinctions between the invention and the prior art).

There was no disavowal, and the term “combined signal” should be construed, in accordance with the language of the claims, to mean “a signal that includes information originating from more than one source.” The claim language does not specify from which source the signal originates, only that the combined signal be received by the master station. The specification is consistent with this definition: the “combined signal or packet is transmitted to or made available to or detected by master station 129.” (Corbitt Decl. Ex. B at Col. 6, ll. 60-61) Importantly, however, the claim language *does* specify what information should be contained in the signal, and the construction of the “combined signal” would be rendered confusing by unnecessarily reiterating it. Hill-Rom’s construction is in keeping with the intrinsic evidence and should be adopted.

D. “contaminated” (’818 Patent: claim 37)

Hill-Rom Construction	GE Construction
Having been in an area designated as a contamination zone	In contact with infectious agents

“Contaminated” should be construed to mean “having been in an area designated as a contamination zone.” This is consistent with the remainder of claim 37, which refers to a person being contaminated “due to exposure to a contamination zone.” Similarly, in the ’818 Patent specification, the terms “contaminated” and “not contaminated” are used exclusively to refer to a status or a designation of needing or not needing to wash – *not* a medical condition. *See, e.g.*, Corbitt Decl. Ex. A at Col. 13, ll. 60-64 (“the master station 129 further updates a Contamination Status associated with the caregiver 110 to indicate that the caregiver 110 is ‘Not Contaminated’ whenever the caregiver 110 wearing a badge 112 has completed a successful handwashing”); *Id.*, Col. 15, ll. 32-39 (“[a]n Infraction Event occurs each time a caregiver 110 exits a contamination zone while ‘Contaminated’, and then does not successfully wash her hands within a Trigger Time of exiting the contamination zone”); *Id.*, Col. 25, ll. 15-17 (“Moreover, equipment 508 and persons 510 are also color coded in order to depict their current status (e.g. contaminated, or not contaminated)”); *Id.*, Claim 9 (“updating status information associated with the person to indicate that the person is contaminated if the time-determining step determines that the preset time period has passed since location of the person was last detected”).

Seeking again to improperly narrow the claim language by adding limitations, GE’s construction requires the presence of “infectious agents” – terms not used in the ’818 Patent and nowhere defined in the intrinsic record. Furthermore, as described in the ’818 Patent (such as in claim 37), the patent does not require laboratory testing, blood work or white count analysis or any medical test to determine whether a person is actually “in contact with infectious agents” to

define contamination. Rather, the term “contaminated” should be construed as it was used consistently by the patentee, and as makes common sense in the context of a system for tracking hygiene compliance: to mean simply that the person has “been in an area designated a contamination zone.” This is in keeping with the canon of claim construction that a term should be construed such that the meaning aligns with the purpose of the claimed invention. *See Innovad, Inc. v. Microsoft Corp.*, 260 F.3d 1326, 1332-33 (Fed. Cir. 2001). Here, the purpose of the claimed invention is plainly to designate whether handwashing is needed, not to diagnose infections.

- E. “tracks movement” (GE’s phrases: “location information which tracks movement of a person through a facility” (’818 Patent: claims 1-3, 5, 10, 12-15) and “location information associated with the movement of the person” (’818 Patent: claims 43-45, 47, 52, 54-56))**

Hill-Rom Construction	GE Construction ²
Reflects changes in location	[Information or data that] determines a person’s locations as he/she moves about a facility, including the person’s current location, previous locations, and location(s) within a designated zone

Claims 1 and 43 of the ’818 Patent provide that the patented methods and systems “track movement” of a person through a facility. The concept of “movement” is simple, and need not be elaborately construed to be understandable to the jury. Both parties’ proposed constructions reflect this simplicity. As for “tracking” such movement, GE’s own analogy of tracking the movement of equipment is useful: “GE’s system uses ordinary infrared and radio frequency sensors to keep track of a person’s location in a hospital, in much the same way that a hospital

² GE has proposed an identical construction for both “location information which tracks movement of a person through a facility” (claim 1) and “location information associated with the movement of the person (claim 43), so we address the terms together.

can track its beds and wheelchairs.” (GE Opp. Br., Dkt. 40, at 4) The intrinsic and extrinsic evidence supports Hill-Rom’s construction: that “tracks movement” means simply “reflecting changes in location.”

Starting with the claims themselves, claim 1 of the ’818 Patent provides that the system “receive[s] location information which tracks movement of a person through a facility” and claim 43 calls for “a plurality of first sensors operable to track movement.” The claims thus contemplate that tracking movement reflects changes in location; otherwise, a “plurality” of sensors would not be required to receive location signals throughout a facility.

The specification is also consistent with movement being construed as “changes in location.” In one embodiment, the specification describes a “movement” into or out of a room or zone as triggering a hygiene event. (Corbitt Decl. Ex. A at Col. 13, ll. 46-47) (“typically, events are caused by movement of persons into or out of a zone.”) This supports the construction that tracking “movement” may be any type of movement, including movement into or out of a zone as the caregiver moves through a facility, and is not limited to movement within only some unspecified, undefined “designated zone” as GE improperly proposes (*see supra* at 8).

Likewise, this aligns with the dictionary definition of movement as “the act of moving from one place or position to another.” (Merriam-Webster Online, *available at* www.merriam-webster.com/dictionary/movement) (last visited July 24, 2014)

GE’s construction is not much different, in that its proposal for tracking movement as what “determines a person’s locations as he/she moves about a facility” conveys that a person is changing location in a facility. Hill-Rom’s construction captures this more succinctly, by using the plainly-understood phrase “reflects changes in location.”

The disagreement arises with regard to “location information,” as to which Hill-Rom does not seek a construction because it is not a “disputed term.” GE has admitted that its system collects location information (Declaration of Robert L. Wallace, Global Product Director, GE Healthcare (Wallace Decl.), Dkt. 42 at ¶¶ 5-11). This makes the dispute as to the meaning of the term academic because the construction would have no bearing on the issues remaining in the case. *See Jang v. Boston Scientific Corp.*, 532 F.3d 1330, 1336 (Fed. Cir. 2008).

GE again attempts to improperly narrow the scope of the claim terms, this time by arguing that “location information” is limited to only “current location, previous locations, and location within a designated zone.” GE’s reliance on the undefined, unsupported and ambiguous term “designated zone” is no more appropriate here than it is for limiting a “patient contact zone.” *See supra* at 8.

Hill-Rom’s construction of “tracks movement” to mean “reflects changes in location” should be adopted because it is consistent with the claims and specification.

2. The Remaining Terms Proposed by GE Require No Construction and Should Be Accorded Their Plain and Ordinary Meaning.

In addition to the five contested claim terms discussed above, GE also requests that the Court construe nine other terms, many of which constitute entire limitations of the asserted claims. For the following reasons, GE’s constructions cannot overcome the “heavy presumption” that claim terms carry their plain and ordinary meaning. *See 3M Innovative Props.*, 350 F.3d at 1370.

- A. **“determining . . . whether a person who has entered a patient contact zone has washed her hands since her most recent exposure to a contamination zone other than her current exposure to the patient contact zone” (’818 patent claim 1) and “determine . . . whether the person washed her hands since her most recent exposure to a contamination zone other than her current exposure to the patient contact zone” (’818 Patent: claim 43)³**

Hill-Rom Construction	GE Construction ⁴
Plain and ordinary meaning	Determining, based in part on previous location information, that a person entering the patient contact zone became contaminated based on her previous exposure to a contamination zone and therefore should wash her hands

The claim language is straightforward; neither unclear nor ambiguous, it should be accorded its plain and ordinary meaning. Aside from the terms of art that are separately construed above (*i.e.*, contamination zone and patient contact zone, *see supra* Sections 1(A) and 1(B)), there is no need to clarify any question of scope for the jury, nor is there any ambiguity, and thus there is no reason to override the plain meaning of a term. *See Union Oil*, 208 F.3d at 995. Indeed, the Court recently used the language as to which GE seeks construction without requiring any additional explanation. (Opinion and Order, Dkt 69, at 2) GE’s proposal is a blatant attempt to replace whole claim limitations with GE’s redrafted language, apparently to avoid infringement. Its proposal is neither supported nor helpful to aid the jury, and should be rejected.

³ GE notates two of its proposed claim terms with ellipses in lieu of the actual claim language. One would presume that the omitted material is nonetheless intended to be captured by the proposed construction, but it is unclear here because the omitted limitations, which pertain to handwashing information, are read out of the claim entirely in GE’s proposed construction.

⁴ GE proposes identical constructions for these terms, so we address them together.

GE seeks to rewrite the claims in two fundamental ways. First, GE changes what is determined in the “determining” step: the claim specifies that the system “determine[s] whether a person . . . *has washed* her hands” – GE seeks to rewrite this to require that the system “determine . . . that a person entering the patient contact zone *became contaminated* . . . and *therefore should wash* her hands.” Second, GE reads out completely the requirement that the determining step be based not only on location information, but also on “handwashing information associated with attempts by the person to wash her hands.”

There is no basis whatsoever for changing the meaning of a claim term, as is the case in GE’s first stab at creatively rewriting this language. It is similarly improper for a claim construction to so manifestly change substantive claim terms, as is the case GE’s second creative effort. *See Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1105 (Fed. Cir. 1996) (holding that court cannot construe claims to eliminate an express limitation or render it meaningless). GE’s construction should be rejected and the plain and ordinary meaning of the claim terms should be adopted.

B. “hygiene compliance record” (’818 Patent: claims 2, 44) and “hygiene non-compliance record” (’818 Patent: claims 3, 45)⁵

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	A record that a person [<i>has/has not</i>] washed her hands since her most recent contamination [<i>for compliance/ non-compliance, respectively</i>]

The terms “hygiene compliance record” and “hygiene non-compliance record” are easily understood and do not require construction because they have a plain and ordinary meaning.

⁵ GE used the term “hygiene non-compliance record” but such term does not appear in claims 3 and 45. We presume that GE intended to refer to “handwashing non-compliance record,” which is the term used in the claims.

Indeed, these terms are as obvious to lay persons as the terms “off-line message” and “online message,” the construction of which this Court recognized “appears to be nothing more than an exercise in ‘picking flyspecks from pepper.’” *See Innovative Commc’ns. Techs.*, 2012 WL 5331573 at *43 (citations omitted) (rejecting proposed construction and adopting plain and ordinary meaning).

GE’s proposal is improper for the further reason that its construction seeks to limit the claims to only one embodiment, where “compliance” and “noncompliance” are based on handwashing after actual contamination. This ignores the intrinsic evidence that describes the several scenarios constituting hygiene compliance and hygiene noncompliance. As is well-settled, it is improper to read limitations from a preferred embodiment described in the specification – even if it is the only embodiment – into the claims. *Gemstar*, 383 F.3d at 1366.

Hygiene “compliance” and “noncompliance” are determined in reference to a facility’s particular handwashing policy or protocol. (*See, e.g.*, Corbitt Decl., Ex. A at Col. 25, ll. 20-22, Col. 2, ll. 33-34) Compliance and non-compliance may be determined based on time since the last wash (Col. 10, ll. 46-48), or based on interactions with equipment (Col. 4, ll. 13-16), activation of handwashing equipment (Col 5, ll. 50-52), occurrences of specific events (Col. 10, ll. 34-35), or frequency of handwashings (Col. 10, ll. 38-40). Thus “hygiene compliance record” and hygiene noncompliance record” cannot be limited to a “most recent contamination” – as GE proposes. This problem is exacerbated by GE’s improper construction of “contaminated” as requiring actual contact with infectious agents (*see* Section 1(E), *supra* at 12-13). There is no support in the specification or claims for such a reading and construing “hygiene compliance” or “noncompliance” to depend on washing since a caregiver’s most recent “contamination” would be similarly incorrect.

C. “substantially constant communication” (’818 Patent claim 15)

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	Communication signals are transmitted over a constant, regular interval

The term “substantially constant communication” should be construed according to its plain and ordinary meaning. GE’s proposed construction is contrary to the claim language and results in an insolubly ambiguous claim when read in place of the term itself, failing the primary test of claim construction, which is “to ensure that questions of the scope of the patent claims are not left to the jury.” *Every Penny Counts, Inc.*, 563 F.3d at 1383.

When used in the claim, GE’s construction would read: “wherein the first location information and compliance information are received by sensors that are in [communication signals are transmitted over a constant, regular interval] with a master station” (bracketed language is GE’s construction). This would render the claim not only ambiguous; it would be unintelligible.

GE’s proposed construction also is directly contrary to the intrinsic evidence. GE attempts to limit the claim to communications at a “constant, regular interval.” The words “constant, regular interval” appear nowhere in the claim language or in the specification. Further, such words are expressly contradicted by the claim language. By substituting “substantially constant” with “constant” and “regular,” GE would effectively read the limitation “substantially” out of the claim. According to a lay dictionary, “substantially” means “being largely but not wholly that which is specified.” (Merriam-Webster Online, *available at* www.merriam-webster.com/dictionary/substantially) (last visited July 24, 2014) The terms “regular,” or “happening over and over again at the same time or in the same way” (*id.* at

www.merriam-webster.com/dictionary/regular) ((last visited July 24, 2014), necessarily excludes the term “substantially,” the latter of which allows for some flexibility, the former prevents it.

GE’s construction should be rejected, and the term should be accorded its plain and ordinary meaning.

D. “status information” (’818 Patent: claim 37)

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	Information indicating that a person was determined to be contaminated and whether the person washed his/her hands as a result thereof

The meaning of “status information” is easily understood and hence does not require any construction. Some claim terms are so simplistic that no construction is required at all. *See, e.g., W.E. Hall Co.*, 370 F.3d at 1350. Violating this fundamental principle, GE attempts to replace the straightforward two-word claim term with a 22-word construction. This is neither necessary nor supported. As the Federal Circuit has held, the “construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Phillips*, 415 F.3d at 1316 (citation omitted).

GE’s construction is not supported by the intrinsic evidence. The specification explicitly states that status information relates to the caregiver’s compliance or non-compliance with the handwashing protocols. (Corbitt Decl. Ex. A at Col. 3, ll. 41-42; Col. 9, ll. 3-7) Status information is not based on determinations of contamination, as would be the case in GE’s proposed construction, but rather with determinations of compliance or non-compliance with protocols of a facility.

GE’s construction is additionally improper because it would add two limiting requirements, *i.e.*, “information indicating that a person was determined to be contaminated *and*

whether the person washed/his hands as a result thereof,” which is contrary to the language of the claim. Such a construction also would improperly prevent the claims from covering the embodiments described in the specification. (*See, e.g., i.d.*, Col. 10, ll. 24-28) By proposing a construction that eliminates embodiments from the patent itself, GE violates the prohibition against changing the scope of the claims through claim construction. *See Union Oil*, 208 F.3d at 995. GE’s construction should not be adopted.

E. “compliance signal indicative of whether the person has or has not used the handwashing device” (’544 Patent: claim 1, 5, 7, 12)

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	A signal generated by the handwashing monitoring device that indicates that a person who should wash her hands did or did not use the handwashing device

There is no ambiguity in the term “compliance signal indicative of whether the person has or has not used the handwashing device” and no reason to depart from the plain and ordinary meaning of the term, especially when read in context with the claim language. No construction of this term is necessary because “the claims themselves provide substantial guidance as to the meaning of particular claim terms.” *See Phillips*, 415 F.3d at 1314.

GE’s proposed construction should be rejected for the additional reasons that it fundamentally changes the scope of the claim and would render the claim ambiguous. GE’s proposal would add a requirement that the hand monitoring device determines who “should” wash his hands. This is directly contrary to the intrinsic evidence; neither the claim language nor the specification teach any determination of who “should” wash his hands. Adding such a determination as a limitation into the claim is thus improper. Not only is no such determination made according to the invention, but at least one embodiment reflects that a “compliance signal”

is generated when a person activates a faucet (Corbitt Decl. Ex. B at Col. 5, ll. 52-55), which clearly does not contemplate a determination of who “should” wash his hands.

Further, when applied to the claim in place of the term, the claim reads “the handwashing monitoring device being configured to generate [a signal generated by the handwashing monitoring device . . .]” (GE’s construction is bracketed language). This is circular, ambiguous, and does nothing to elucidate the meaning of the claim. GE’s proposed definition is insufficient to overcome the “heavy presumption” that the claim term is entitled to its plain and ordinary meaning, and should be rejected.

F. “identification signal from the badge has been received by the sensor” (’544 Patent: claim 1, 5, 7, 12)

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	The sensor detects a signal from a badge, where the badge does not receive signals from a device that continuously broadcasts a periodic signal into a monitored area

The term “identification signal from the badge has been received by the sensor” does not require construction because it is not a “disputed term.” *Jang*, 532 F.3d at 1336 (limiting claim construction to those elements in dispute, to avoid “rendering an advisory opinion as to claim construction issues that do not actually affect the infringement controversy between the parties”). GE has admitted that its sensor receives an identification signal from the badge. (Declaration of Gill R. Tsouri, Dkt 41, at ¶ 39) The construction of this term thus would have no bearing on the issues remaining in the case. Nor should GE’s construction override the “heavy presumption” that the term is entitled its plain and ordinary meaning.

Moreover, GE’s construction attempts to add a limitation for a hardware component, “a device that continuously broadcasts a periodic signal into a monitored area” that is nowhere

found in the claims, the specification, or the prosecution history (a device “*ex machina*”). Where such component is not described in the intrinsic evidence, the inventors clearly did not intend for the invention to be so limited. *See Phillips*, 415 F.3d at 1316. GE’s construction should be rejected.

**G. “alert indicator fixedly located in proximity to the handwashing device”
('544 Patent: claim 7)**

Hill-Rom Construction	GE Construction
Plain and ordinary meaning	A device that is permanently located in proximity to a handwashing device and that provides feedback that indicates a person’s current contamination status and/or compliance/non-compliance status

By its proposed construction, GE attempts to rewrite the entirety of claim 7 of the '544 Patent. Plainly, no such rewriting is needed or permitted. The claim is understandable on its own, and the intrinsic evidence supports a scope commensurate with the plain and ordinary meaning. Indeed, this is a case where the ordinary meaning of claim language is may be readily apparent” and claim construction in such cases “involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. Here, an “alert indicator” is simply an indicator that provides an alert. “In proximity to the handwashing device” means “near a handwashing device.” And “fixedly located” means attached, not moveable between locations. This is in keeping with another decision in this district, where a “fixed” component was construed according to its plain meaning. *See, e.g., Baby Jogger LLC v. Britax Child Safety, Inc.*, Case No. 2:12-cv-452, 2013 WL 4538809, at *4 (E.D. Va. Aug. 26, 2013).

The specification is consistent with the scope of the plain meaning. “Alert indicators” have many different forms and functions throughout the specification—the only constant is that

the alert indicators provide an “alert”: Alert indicators may be visual, audio, or tactile (Corbitt Decl. Ex. B at Col. 3, ll. 48-50), may be located near a handwashing device (Col. 8, ll. 3-28), may be “implemented to either remind caregiver 110 to wash hands 107 or to indicate that a handwashing compliance signal has been recorded” (Col. 8, ll. 32-35), they may be located in a badge (Col. 8, ll. 59-63), may be variable based on degrees of compliance (Col. 9, ll. 5-7), and may provide feedback based on whether a handwashing event has occurred or not (Col. 8, ll. 14-16).

GE’s proposed, improperly-narrowed construction is expressly contradicted by the specification. GE substitutes the term “permanently” for the term “fixedly.” However, in the specification, “fixedly” is used to distinguish alert indicators that are attached from those that are “portable” such as those in caregiver badges (Col. 8, ll. 59-63). Additionally, GE attempts to limit the alert indicator to provide only certain types of feedback, *i.e.*, to indicate “a person’s current contamination status and/or compliance/non-compliance status.” The specification is not so limited, and the alert indicators that are described in it indicate any type of information, including reminder indications (Col. 8, ll. 32-35) or indications simply that a handwashing event has occurred (Col. 8, ll. 11-13).

GE’s attempts to narrow the plain language of the claim to a single embodiment among several described in the specification are improper. *Gemstar*, 383 F.3d at 1366. They should be rejected.

3. “Master Station” Should Be Construed As Agreed By the Parties.

A. “master station” (’818 Patent: claims 15, 43, 47, 52, 54-56; ’544 Patent: claims 1, 5, 7, 12)

Agreed Construction
A component or group of components having memory, a processor, and software for monitoring hand hygiene

The parties agree that the term “master station” should be construed to mean “a component or group of components having memory, a processor, and software for monitoring hand hygiene.” This construction is consistent with the intrinsic evidence.

The intrinsic evidence makes clear that the master station can be either a central device or a decentralized collection of components.⁶ This is consistent with the claims; for example, claim 12 of the ’544 Patent calls for the master station to include at least one of a central device and a number of distributed components.⁷ Additionally, the specification indicates that the software can be stored in the memory (Corbitt Decl. Ex. A at Col. 2, ll. 45-48), or distributed amongst other components of the system, or integrated into software of an existing RTLS in the facility. (*Id.*, Col. 10, ll. 13-23) Finally, the specification provides that the software “causes the master station 129 to . . . monitor compliance with a hygiene policy defined for the facility.” (Col. 2, ll. 45-49) The parties include this for consistency with the intrinsic record.

⁶ GE originally asserted that “master station” should be construed as “A computing device having a processor, memory, and software stored in the memory.” During the meet-and-confer process, it agreed to Hill-Rom’s proposal contained herein, acknowledging that the master station was not, in fact, a centralized computer but rather could comprise, as disclosed in the patents, a collection of de-centralized components.

⁷ In patent drafting, the convention of using the phrase “at least one of” means that the list that follows it should be construed to mean that any single member or combination of the numbers on the list may be selected. *See, e.g., Ex Parte Gross*, Appeal No. 2011-004811 at 4, n.1 (PTAB Apr. 14, 2014).

CONCLUSION

The goal of the *Markman* process should be to reach a construction of the claims at issue that is faithful to the plain language of the claims and the patent's specification. While it may be tempting to rewrite a patent to conform to litigation positions, that is improper and grounds for reversal. In the end, as argued above, the constructions that stay true to the language of the patents and most naturally align with the patent's description of the inventions will be, in the end, the correct constructions. *Phillips*, 415 F.3d at 1316. For all the foregoing reasons, Hill-Rom's constructions most naturally fulfill the true goal of *Markman* and Hill Rom respectfully requests that the Court enter an Order construing the disputed claim terms as Hill-Rom has proposed.

Dated: July 24, 2014

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on July 24, 2014, I will electronically file the foregoing with the Clerk of the Court using the CM/ECF system, which will send a notification of such filing (NEF) to the following:

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